

CALFED Bay-Delta Program

Drinking Water Quality Program - Program Plan Year 8

(State FY 2007-2008; Federal FY 2008)

Implementing agencies:

California Department of Health Services
U.S. Environmental Protection Agency
State Water Resources Control Board
Central Valley Regional Water Quality Control Board

Coordinating agencies:

California Department of Water Resources
California Department of Fish and Game
U.S. Bureau of Reclamation
U.S. Geological Survey
U.S. Fish and Wildlife Service
NOAA Fisheries



Introduction

This Water Quality Program Plan identifies the CALFED Drinking Water Quality Program (DWQP) activities expected to be conducted during State Fiscal Year 2007-2008 and Federal Fiscal Year 2008.

As stated on page 65 of the CALFED ROD, the general water quality target is “continuously improving Delta water quality for all uses, including in-Delta environmental and agricultural uses” and its specific drinking water target is “providing safe, reliable, and affordable drinking water in a cost-effective way, [is] to achieve either: (a) average concentrations at Clifton Court Forebay and other southern and central Delta drinking water intakes of 50 µg/L bromide and 3.0 mg/L total organic carbon, or (b) an equivalent level of public health protection using a cost-effective combination of alternative source waters, source control and treatment technologies.” (This latter phrase has come to be referred to as “ELPH”).

In 2005, the California Bay-Delta Authority (BDA) disapproved the 2006 Water Quality Program Plan because major activities described by the plan were not funded. Although that situation had not changed, the BDA approved the 2007 Program Plan. In the 2007 plan, new activities were added to prepare for CALFED End of Stage I decisions; these activities are again described in this plan.

In late 2006, CALFED restructured its programs, and environmental water quality was moved from the Ecosystem Restoration Program to the Water Quality Program. The Water Quality Program is now to address both drinking water quality and environmental water quality.

Priorities & Schedule

1. Drinking Water Quality Program Final Assessment: As in 2007, the Drinking Water Quality Program’s highest priority will be to provide sound information to assist in the decisions scheduled to be made at the end of Stage 1 (late 2007), specifically regarding the role of a Through-Delta Facility in water quality improvement. At one point, the Program intended to use Regional ELPH planning to fill critical information gaps, but funding difficulties and timing constraints made this approach impractical. Therefore, the Program is gathering representative information regarding projects that influence the quality of drinking water from the Delta (i.e., costs and benefits of source water improvement, conveyance, and treatment) to inform Stage 1 Decisions. This information will be synthesized into a Final Assessment, which is also a task required in the ROD. The USBR has allocated approximately \$280,000 of CALFED funds to support this work (and the CalFed Science program added another \$275,000). Regional ELPH Planning will continue to be a priority element of any long term implementation strategy (i.e. during Stage 2 of CALFED). Key dates are:

- Draft Final Assessment – 8/07
- Peer review of Final Assessment – 9/07
- Final Assessment – 11/07

2. Central Valley Drinking Water Policy: A multi-year effort is currently underway to develop a drinking water policy for surface waters in the Central Valley. As water flows out of the Sierra foothills and into the valley, pollutants from a variety of urban, industrial, agricultural, and natural sources affect the quality of water, which leads to drinking water treatment challenges and potential public health concerns. Current policies and plans lack water quality objectives for several known drinking water constituents of concern, such as disinfection by-product precursors and pathogens, and do not include implementation strategies to provide effective source water protection. The exact types of regulatory requirements that will be included in the drinking water policy have not been determined but the goal is to develop a policy that provides clear guidance to ensure consistent source water protection.

Major tasks in Year 8 include: refinement of key conceptual models, analytical modeling, evaluation of water quality goals and drinking water treatment, and compilation of economic information. Regional Water Board staff also plan to hold CEQA scoping meetings on policy alternatives in the spring of 2008, with 2009 as the timeframe for developing the proposed policy.

Work done for this effort will also support the Final Assessment, the end of Stage I decisions and the development of performance measures.

3. Performance measures: A multi-agency team will complete development and begin implementation of a limited, initial set of water quality performance measures to assess program effectiveness in the future. (These are “tier III measures and are different than the “tier I and II” measures included in BDPAC’s retrospective assessment.) Conceptual models developed for the Central Valley Drinking Water Policy (on salinity, nutrients, pathogens and organic carbon) will be used to develop performance measures and to recommend needed future monitoring.

4. Conveyance: There are several priority DWR-lead conveyance actions underway that are expected to improve water quality:

- **Frank’s Tract Pilot Project (FTPP):** As the lead agency for FТПP, DWR will conduct a feasibility study from June 2007 to September 2009. In addition, this year’s activities will include:
 - Development of a preliminary design (11/07) and long-term monitoring program for the FТПP;
 - Collecting baseline data and start preparation of the EIR/EIS (7/07);
 - DEIR/DEIS (6/08)
 - Analyzing flow and salinity data collected using the monitoring stations installed last year;
 - Conducting a regional fish study (11/07-1/08) to understand the migratory behavior of fish in the Delta to guide operation of the FТПP;
 - Completing a summary report for the End-of-Stage One report (Fall 07); and
 - Securing funds for construction of FТПP from State, Federal and water contractors. (Cost is \$7.1 m (State) and \$0.9 m (SWP), including regional field study).
- **CCWD Alternative Intake Project (AIP):** The EIR/EIS were completed in the fall of 2006. Full design is being completed in early 2008, with construction beginning in the spring of 2008 and the project on-line as early as 2010. All permits necessary for construction have been obtained, as have all necessary land and rights-of-way.

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- **CCWD Canal Replacement project:** This became a sub-project of the Veale-Byron Tract Project in the ROD and was included in the Delta Improvements Project. Construction design is complete and all permits have been obtained. Phase 1 was planned to begin fall 2007 to replace an unlined section of the CC Canal with a pipe, but has been delayed one year because of hydrologic conditions (construction requires shut down of the canal intake for an extended period and the very dry conditions in 2007 along with protection measures necessary for delta smelt made the shutdown not feasible in 2008). This is intended to improve water quality and remove risks of levee failure (by eliminating the levees and putting the water in a pipe.)

5. ELPH (“equivalent level of public health”) and IRWMP (integrated regional water management planning): Although it was a high priority to fund regional ELPH plans, the Program has been unsuccessful in its attempts to obtain or direct any funding specifically for this purpose. The Water Quality Program will attempt to work with DWR and the SWRCB to try to incorporate drinking water quality as a higher priority in the Integrated Regional Water Management construct and to obtain funding to implement this important activity. (The Water Quality Program reviewed all first-round CALFED-area IRWM proposals and found that water quality goals were not well addressed in that IRWMP work.)

6. Environmental Water Quality: During Year 8, the CALFED Water Quality Program will incorporate environmental water quality into its program activities. This will be accomplished through coordinating with the environmental water quality agencies and stakeholders, tracking environmental water quality projects, identifying priority issues, and providing both agency and stakeholder forums for issues discussion. The Year 9 Program Plan will have more specific plans that will be based on experience from Year 8.

Coordinated Actions

As a result of the 10 year Action Plan, two Water Quality activities/programs in the ROD were identified as Coordinated Actions for CALFED - New Treatment Technology Pilots and Drinking Water Source Improvement Grants. This means that these activities are associated with and contribute to CALFED, but would continue even if CALFED were to be discontinued. These activities will continue to be done by implementing agencies, and, for those projects that have relevance to CALFED, the agencies will report to CALFED on the status of these activities annually. The activities will be conducted “in the CALFED way” including an open and transparent public input process, consideration of environmental justice, robust science, and evaluation of performance measures.

Treatment Technology Pilots are being carried out by the California Department of Health Services (CDHS) through Proposition 50 grants (Chapters 4a2 and 6b). The Source Improvement Grants are being carried out by the State Water Resources Control Board through grants from Proposition 13 and Proposition 50, and by the Department of Health Services through Source Water Protection Grants from Proposition 50 and Source Water Protection loans from the federally-funded Safe Drinking Water Act State Revolving Fund.

Public Participation Process

CDHS uses a public process in the development of criteria and the implementation its funding programs. For instance, after presenting the draft Prop 50 implementation criteria at a series of public workshops around the state, CDHS established a stakeholder group with representatives from small and large drinking water systems, advocates for environmental justice and disadvantaged communities, and organizations representing water systems. CDHS worked with this stakeholder group in finalizing funding priority lists and project invitation lists and in developing changes in the criteria to improve access to funding for water systems serving disadvantaged communities. The same stakeholder group is participating in the development of CDHS' Proposition 84 criteria.

Environmental Justice

CDHS has invited 2 CALFED-related projects for \$400,000 from Proposition 50 that serve areas identified as "disadvantaged communities". These projects will contribute to improved public health to communities served by the water systems receiving funding. In addition, CDHS has invited 14 projects for \$10 million in funding that are not associated with CALFED, but that address the public health issues of drinking water quality in areas identified as "disadvantaged communities". CDHS continues to seek out projects that serve "disadvantaged communities" that are eligible for Proposition 50 funding programs.

Accomplishments

The following are the key Drinking Water Quality Program accomplishments for State FY 2007 (July 1, 2006 to June 30, 2007)

- ◆ Initiated work on the CALFED Water Quality Program – Stage 1 Final Assessment (Drinking Water Quality Program Final Assessment). This included drafting a work plan, securing \$555,000 in funding, writing contract scopes of work, and collecting information.
- ◆ Work continued on the Central Valley Drinking Water Policy last fiscal year with contributions from stakeholders, the CALFED agencies and stakeholders. The Regional Water Board conducted a public workshop on development of the Drinking Water Policy and work on the remaining conceptual models was nearing completion. Work continued on identifying monitoring needs and existing regulatory tools.
- ◆ The Department of Water Resources initiated work on a series of studies looking at various options for improving water quality at the SWP and CVP pumps by controlling flows in channels near Franks Tract and in Three-Mile Slough.
- ◆ Contra Costa Water District completed construction and started operation and monitoring of their agricultural drainage projects on Rock Slough and Old River. They also completed design, obtained all permits and initiated work preparing for construction of their project to line a portion of the Contra Costa Canal and completed the EIR/EIS for their Alternative Intake Project, and received biological opinions for construction and operation of the Project..

- ◆ The Department of Public Health established priority lists for their Prop 50 funds identifying 13 water treatment improvement and research projects with a total grant value of \$122 M.
- ◆ SWRCB expenditures that help to address CALFED program goals totaled \$10.7 M.

Budget

The following funding estimates were drawn from the February 2007 Cross-cut Budget:

DHS - \$88,750,000

DWR – \$33,867,000 (This funding is also captured in the Conveyance Program Plan)

BOR - \$ 4,750,000

TOTAL = \$127,367,000